



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/634,806	08/08/2000	Eric Lenz	LAMIP144/P0665	4483

22434 7590 05/16/2003

BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778

EXAMINER

ALEJANDRO MULERO, LUZ L

ART UNIT	PAPER NUMBER
----------	--------------

1763

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/634,806

Applicant(s)

LENZ ET AL.

Examiner

Luz L. Alejandro

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7-12,18,19,22-26 and 28-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7-12,18-19,22-26 and 28-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3-3-03 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 10-11, 18, and 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Rice et al., U.S. Patent 5,722,668.

Rice et al. shows the invention as claimed including an apparatus comprising: a vacuum chamber wall 12 defining a main cavity and an opening; an exhaust port 36 in fluid communication with the main cavity 10 for establishing a vacuum in the main cavity; a cover for sealing the opening when the cover is supported by the chamber wall, comprising: a first section 24 adjacent the main cavity, wherein the first section of the cover is supported by the chamber wall 12; a second section 26 on a side of the first

Art Unit: 1763

section opposite of the main cavity, wherein the second section is supported by the first section only where the first section is supported by the chamber walls; a pocket between the first section 22,24 and the second section 26; and a critical element 20 supported by a region of the first section and extending into the main cavity from the first section, wherein support of the second section 26 by the first section is not above support of the critical element by the first section, wherein the pocket extends between the first section and the second section above the region of the first section upon which the critical element is supported, so that at least part of the first section is between the critical element and the pocket, and the first section extends across the opening and separates the critical element from the pocket (see fig. 1 and col. 3-line 38 to col. 4-line 25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 1763

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 12, 23 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice et al., U.S. Patent 5,722,668.

Rice et al. is applied as above but fails to expressly disclose a vacuum tight seal between the first and second sections and/or a vacuum tight seal between the first section and the chamber wall. Rice et al. does disclose in the prior art the use of vacuum seals 56,58,60 in a plasma apparatus (see fig. 2 and col. 4-line 64 to col. 5-line 2). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Rice et al. so as to include the vacuum seals disclosed in the prior art of Rice et al. because this would be a suitable means for preventing air from leaving or entering various regions of the apparatus.

Claims 7-9, 19, 22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice et al., U.S. Patent 5,722,668 in view of Collins et al., U.S. Patent 6,365,063 B2.

Rice et al. is applied as above but fails to expressly disclose the critical element being an electrode with a radio frequency power source connected to the electrode, and a vacuum tight seal between the first and second sections and/or a vacuum tight seal between the first section and the chamber wall.. Collins et al. discloses a silicon

Art Unit: 1763

element 52 similar to the silicon element in Rice et al. adapted so as to form an electrode with an RF power source 210 connected to the electrode 52 (see fig. 17A and col. 15-lines 15-39). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Rice et al. so as to connect the critical element to an RF power supply so as to make the critical element an electrode because in such a way the apparatus has added flexibility in that either inductive coupling or capacitive coupling processes can be conducted within the apparatus. Furthermore, with respect to the vacuum tight seals, Rice et al. does disclose in the prior art the use of vacuum seals 56,58,60 in a plasma apparatus (see fig. 2 and col. 4-line 64 to col. 5-line 2). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Rice et al. so as to include the vacuum seals disclosed in the prior art of Rice et al. because this would be a suitable means for preventing air from leaving or entering various regions of the apparatus.

Response to Arguments

Applicant's arguments with respect to claims 1, 7-12, 18-19, 22-26 and 28-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

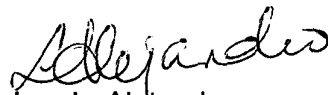
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luz L. Alejandro whose telephone number is 703-305-

Art Unit: 1763

4545. The examiner can normally be reached on Monday to Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory L. Mills can be reached on 703-308-1633. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Luz L. Alejandro
Primary Examiner
Art Unit 1763

May 14, 2003